



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,585	01/15/2004	Jonathan W. Conaway	ECI06-GN015	5910

30074 7590 08/08/2006

TAFT, STETTINIUS & HOLLISTER LLP
SUITE 1800
425 WALNUT STREET
CINCINNATI, OH 45202-3957

EXAMINER

SCHELL, LAURA C

ART UNIT	PAPER NUMBER
----------	--------------

3767

DATE MAILED: 08/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/758,585

Applicant(s)

CONAWAY, JONATHAN W.

Examiner

Laura C. Schell

Art Unit

3767

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-22 and 34-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-22 and 34-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "valve seat" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 18-22 and 34-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear to the examiner what the Applicant claims the valve seat to be, as it is not labeled in the drawings, nor is such a label or explanation found in the specification. Furthermore, it is unclear what Applicant is claiming as the valve body, as Figs. 3 and 4 use the reference numeral (52) to label the valve body, yet claim 34 states that the helix (76) is mounted to the valve body and wound around the valve body, which is not what is shown in Applicant's drawings. Applicant's drawings clearly show that the helix is mounted to the needle (50) and not to the valve body (52). Additionally, it is unclear to the examiner how the Applicant is claiming that the helix "biases the valve body away from the valve seat" (claim 34, but also see 18). Since the helix does not contact the valve body (52) and the valve body is stationary due to the detents (70) it is unclear how the helix influences the valve body. Lastly, it is unclear how Applicant can claim, as claimed in claim 35 for example, that "the valve body (52) includes a rotationally repositionable dial". It appears that Applicant is giving two distinct elements the same name/label of "valve body". An explanation and correction is respectfully requested.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kirchner (US Patent No. 4,583,970) in view of Malcolm et al. (US Patent No. 5,531,712).

Kirchner discloses a breast pump (Fig. 1) comprising: an interface (1) adapted to create a fluidic seal between a circumferential portion of the interface and a breast; a reservoir (3) in fluid communication with the interface for receiving milk drawn from the breast and passing by the interface; a sink (11) in fluid communication with the interface, where the sink induces a reduced pressure approximate the interface to draw milk from the breast and past the interface and into the reservoir; and a pressure regulator (22) in fluid communication with the sink to regulate the reduced pressure approximate the interface. Kirchner further discloses that the sink includes a chamber (2) comprising a conduit having a piston (24) riding therein, the piston being repositionable within the conduit to induce the reduced pressure approximate the interface. Kirchner also discloses that the piston travels within the conduit in a linear path (Fig. 1). Kirchner further discloses that the piston is coupled to a handle (18) repositionable by a user.

Kirchner, however, does not disclose that the valve body is biased away from the valve seat, or that it includes a helix. Malcolm, discloses a pressure regulator (Figs. 1 and 2, element 1) that includes a valve seat (near 7) and a valve body (12) wherein the

valve body is selectively repositionable to manipulate the reduced pressure approximate the interface by varying the proximity of the valve seat with respect to the valve body, and the valve body is biased away from the valve seat (here the helical thread (13) is what biases the valve body in a position away from the valve seat, as seen in Fig. 2). Malcolm further discloses that the valve includes a helix (the helical thread (13)) that is mounted to the valve body (12) so that the helix is wound around the valve body (as shown in Fig. 2, the actual valve body (12) appears to have diagonal lines through it to signify a certain type of material, while the helical thread (13) does not have any type of lines through it, which serves to distinguish it as a different material from the actual valve body, and therefore the helical thread can be considered to be mounted to the valve body). Malcolm further discloses that the pressure regulator includes a dial actuator (16) being repositionable in at least one of a clockwise or counterclockwise direction to vary the proximity of the valve seat with respect to the valve body. Malcolm also discloses that the valve body includes a circumferential housing (23) that houses the helix (the helix is found within the housing (23)). Malcolm further discloses that the periphery of the helix (13) includes a generally circular disc (12 can be likened to be the disc (Fig. 9, 94) as disclosed in Applicant's application, with the helix extending from the body of the disk) and that the includes a step change (22) that interfaces with the circumferential housing to limit the rotational travel of the helix with respect to the circumferential housing (col. 2, lines 37-48).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Kirchner with the regulator valve, as taught by

Art Unit: 3767

Malcolm, as Malcolm discloses that this is for regulating the vacuum created by a pump and is designed particularly for medical devices, and can be applied to many different medical devices which need a relief valve (col. 2, lines 11-18), as is the case with Kirchner.

Response to Arguments

Applicant's arguments with respect to claims 18-22 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Schell whose telephone number is (571) 272-7881. The examiner can normally be reached on Monday-Friday 8am-4:30pm.

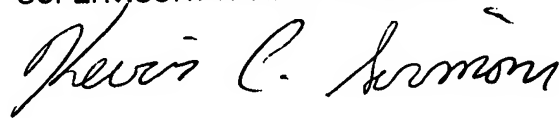
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Sirmons can be reached on (571) 272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LCS

LCS

KEVIN C. SIRMONS
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to read "Kevin C. Sirmons", written in a cursive style.